

## SEQUENCE LISTING.

<110> Heinz, Ernst  
 Girke, Thomas  
 Scheffler, Jodi  
 Da Costa e Silva, Oswaldo

<120> Plants expressing  $\Delta 6$ -desaturase genes, PUFAS-containing oils from these plants, and a process for the preparation of unsaturated fatty acids

<130> 0093/000032

<140> US 10/019,048

<141> Filing date not yet granted

<150> PCT/EP00/006223

<151> 2000-07-04

<160> 2

<170> WordPerfect version 6.1

<210> 1

<211> 2012

<212> DNA

<213> Physcomitrella patens

<220>

<221> CDS

<222> (319)..(1896)

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Patent = 5705700

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&lt;210&gt; 2

&lt;211&gt; 525

&lt;212&gt; PRT

&lt;213&gt; Physcomitrella patens

&lt;400&gt; 2

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TOGETHER - SHOWS

## SEQUENCE PROTOCOL

&lt;170&gt; PatentIn Vers. 2.0

&lt;210&gt; 1

&lt;211&gt; 2012

&lt;212&gt; DNA

&lt;213&gt; Physcomitrella patens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (319)..(1896)

&lt;400&gt; 1

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Val Tyr Asn Ser Ser Lys Glu Phe Val Ser Ala Gln Ile Val Ser Thr				
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Arg Asp Ile Lys Gly Asn Ile Phe Asn Asp Trp Phe Thr Gly Gly Leu				
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acc agt taa cagtcctttgg aaagcttggc aattgatctt tattctccac 1936  
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<212> PRT

<213> Physcomitrella patens

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Ser Tyr Val Ser Ser Thr Val Gly Ser Trp Ser Val His Ser Ile Gln  
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Pro Leu Lys Arg Leu Thr Ser Lys Lys Arg Val Ser Glu Ser Ala Ala  
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Val Gln Cys Ile Ser Ala Glu Val Gln Arg Asn Ser Ser Thr Gln Gly  
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Thr Ala Glu Ala Leu Ala Glu Ser Val Val Lys Pro Thr Arg Arg Arg  
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Ser Ser Gln Trp Lys Lys Ser Thr His Pro Leu Ser Glu Val Ala Val  
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His Asn Lys Pro Ser Asp Cys Trp Ile Val Val Lys Asn Lys Val Tyr  
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Ala Ser Thr Trp Lys Ile Leu Gln Asp Phe Tyr Ile Gly Asp Val Glu  
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10019048-12201

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 Leu His Asn Gln Val Phe Glu Thr Arg Trp Leu Asn Glu Val Val Gly  
 260 265 270  
 Tyr Val Ile Gly Asn Ala Val Leu Gly Phe Ser Thr Gly Trp Trp Lys  
 275 280 285  
 Glu Lys His Asn Leu His His Ala Ala Pro Asn Glu Cys Asp Gln Thr  
 290 295 300  
 Tyr Gln Pro Ile Asp Glu Asp Ile Asp Thr Leu Pro Leu Ile Ala Trp  
 305 310 315 320  
 Ser Lys Asp Ile Leu Ala Thr Val Glu Asn Lys Thr Phe Leu Arg Ile  
 325 330 335  
 Leu Gln Tyr Gln His Leu Phe Phe Met Gly Leu Leu Phe Phe Ala Arg  
 340 345 350  
 Gly Ser Trp Leu Phe Trp Ser Trp Arg Tyr Thr Ser Thr Ala Val Leu  
 355 360 365  
 Ser Pro Val Asp Arg Leu Leu Glu Lys Gly Thr Val Leu Phe His Tyr  
 370 375 380  
 Phe Trp Phe Val Gly Thr Ala Cys Tyr Leu Leu Pro Gly Trp Lys Pro  
 385 390 395 400  
 Leu Val Trp Met Ala Val Thr Glu Leu Met Ser Gly Met Leu Leu Gly  
 405 410 415  
 Phe Val Phe Val Leu Ser His Asn Gly Met Glu Val Tyr Asn Ser Ser  
 420 425 430  
 Lys Glu Phe Val Ser Ala Gln Ile Val Ser Thr Arg Asp Ile Lys Gly  
 435 440 445

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Asn Ile Phe Asn Asp Trp Phe Thr Gly Gly Leu Asn Arg Gln Ile Glu  
450 455 460

His His Leu Phe Pro Thr Met Pro Arg His Asn Leu Asn Lys Ile Ala  
465 470 475 480

Pro Arg Val Glu Val Phe Cys Lys Lys His Gly Leu Val Tyr Glu Asp  
485 490 495

Val Ser Ile Ala Thr Gly Thr Cys Lys Val Leu Lys Ala Leu Lys Glu  
500 505 510

Val Ala Glu Ala Ala Ala Glu Gln His Ala Thr Thr Ser  
515 520 525

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